

Abstract

INTERFACE CIRCUIT AND METHOD FOR DIGITAL SIGNALS

An interface circuit (100) and method for interfacing digital signals with a bus, comprising: means (TxduC) for receiving digital signals, for transmission on the bus, relative to a first ground potential; transformer means (106) for passing edges of the received digital signals; and reconstruction means (110) for reconstructing signals from the edges of signals passed by the transformer means, so as to produce digital signals, for transmission on the bus, relative to a second ground potential. A similar circuit (CANL, 130, 134) interfaces, from the second ground potential to the first ground potential, signals received from the bus. The reconstruction means may use Schmitt triggers, whose bias points may be set by oscillators incorporating further Schmitt triggers (120, 142) located on the same semiconductor die to reduce temperature variability.